The Week That Was: 2013-11-16 (November 16, 2013) Brought to You by SEPP (www.SEPP.org) The Science and Environmental Policy Project

Quote of the Week: We have found it of paramount importance that in order to progress, we must recognize our ignorance and leave room for doubt. Scientific knowledge is a body of statements of varying degrees of certainty — some most unsure, some nearly sure, but none absolutely certain. Richard Feynman, Value of Science

Number of the Week: \$22.2 Billion US v. 24.7 Billion US

THIS WEEK:

By Ken Haapala, Executive Vice President, Science and Environmental Policy Project (SEPP)

Is the IPCC Logically Challenged? Writing in American Thinker, SEPP Chairman Fred Singer recaps the major failures in science and in logic that the UN Intergovernmental Panel on Climate Change (IPCC) employed in its five scientific Assessment Reports (AR) from 1990 to 2013. The scientific failures in the first three reports, such as Mr. Mann's Hockeystick, have been clearly discredited. The logical errors in AR4 and AR5 are more subtle. As Singer states: "Their first step is to construct a model that tries to match the reported 20th-century surface warming. This is not very difficult; it is essentially a 'curve-fitting' exercise: By selecting the right level of climate sensitivity and the right amount of aerosol forcing, they can match the reported temperature rise of the final decades of the 20th century, but not the initial decades -- as becomes evident from a detailed graph in their Attribution chapter."

The issue arose what type of logical error is this? Aristotelian scholar Viscount Monckton of Brenchley provided the answer. He wrote: "If the IPCC argument you are challenging is that we can only explain observed warming in the late 20th century if we assume a large anthropogenic forcing, but that we cannot explain it without that forcing, then the logical fallacy the IPCC here perpetrates is not the argumentum ad petitionem principii: it is the argumentum ad ignorantiam, the fundamental fallacy of arguing from ignorance. If we do not know why the warming occurred, and we merely assume that the warming must be manmade because we cannot (or do not want to) think of any explanation except high climate sensitivity to manmade greenhouse-gas emissions, then we perpetrate the fallacy of argument from ignorance."

One can illustrate this error with algebra. If A + B = 10, where A is the natural variation, B is the human influence, and 10 is the measured change. One cannot solve for the numerical value of B without knowing the numerical value of A. Yet the models are used to simultaneously solve for the values of both, without independent testing of the values for natural variation, except for changes in solar irradiance. Of course, the models do not work if the value of B is removed. But this not independent confirmation of the validity of the models. As The Right Climate Stuff Team reported, we cannot hope to successfully model the human influence on climate without first successfully modeling the natural influences on climate. The IPCC and the climate establishment does not even try to model the natural influences on climate.

This week, scientists at the Lawrence Livermore National Laboratories (LLNL) employed the same faulty argument in linking precipitation with global warming. For Singer's evaluation see Article #1, for the LLNL paper see link under Model Issues.

COP 19: The 19th Conference of Parties (COP) to the United Nations Framework Convention on Climate Change opened on November 11 in Warsaw, Poland, a country that gets 80 to 85% of its electrical power from coal. According to reports, a pro-coal rally was staged that attracted some 50,000 Poles.

The conference began with special pleading on stopping climate change with claims that the destruction wrought by Typhoon Haiyan is illustrative of the dangers of human-caused climate change. Though the destruction was real and a natural disaster, the intensity of the storm and the loss of human life were exaggerated in the early reports. The actual evidence does not support the claims that such storms are becoming more frequent or more intense.

Generally, the first week of these conferences involve political posturing by lower-level government officials, such as developing countries demanding monetary payments from developed countries for global warming/climate change. A group headed by China and Brazil raised the ante by insisting that the payments should be based on total carbon dioxide (CO2) emissions starting about 1800. If Western emissions took the world out of the Little Ice Age; the developing countries should be paying the West.

The conference also had some shocks. Australia announced it will not be involved in such monetary transfers. Japan announced it has changed its CO2 emissions goals from a significant cut to a modest increase in emissions.

WMO: Especially for COP 19, the World Meteorological Organization (WMO) issued a press release with the title "Provisional Statement on Status of Climate in 2013." It claimed continuing high temperatures globally and many climate extremes worldwide. As expected, it had typical alarmist writing; but, interestingly, the press release stated "For use of the information media -- Not an official record."

The press release also asserted "Temperatures so far this year are about the same as the average during 2001-2010, which was the warmest decade on record" ... "The year 2013 is currently on course to be among the top ten warmest years since modern records began in 1850." Such statements prompt one to wonder about the quality of the records in 1850.

Natural Causes? Roy Spencer announced that, finally, a paper he did with William Braswell has been published in a peer reviewed journal, Asia-Pacific Journal of Atmospheric Sciences. They use a simple, one dimensional model, to explore the influences of El Nino and La Nina activity on the earth's climate, as it relates to the sensitivity of the earth's climate to a doubling of CO2. They

test the model against changes in the global oceanic radiative budget, since March 2000, as observed by Clouds and the Earth's Radiant Energy System (CERES) satellite instruments.

They find that when their proposed natural radiative warming effect of El Nino is included, the climate sensitivity to CO2 is reduced substantially — to 1.3 deg. C. This is below the IPCC estimate of 1.5 deg. C to 4.5 deg. C.

In the post, Spencer writes: "What I am saying is that El Nino is associated with changes in Earth's radiative balance which are not just a feedback response to surface warming, but also force some of that warming. When that "internal radiative forcing" effect is included, optimizing the agreement with 10 years of satellite radiative budget measurements, it considerably reduces the diagnosed sensitivity of the climate system."

It remains to be seen if the research and the paper hold up. However, the research illustrates the need to independently test the natural influences on the earth's climate before concluding that the IPCC findings are definitive. Links to Spencer's post and the article can be found under Challenging the Orthodoxy.

Denial: On her web site, Judith Curry discusses two articles on the use of the term climate denier or similar terms in discussing those skeptical that humans are the primary cause of global warming/climate change. In an aptly named article "Words that think for us," Edward Skidelsky writes: "The extension of the "denier" tag to group after group is a development that should alarm all liberal-minded people. One of the great achievements of the Enlightenment—the liberation of historical and scientific enquiry from dogma—is quietly being reversed."

Please see link under Communicating Better to the Public – Go Personal ************

Taking Credit: For the first time in nearly 20 years, in October 2013, US oil production exceeded imports. The administration immediately pulled a debating trick described by the 19th century philosopher Schopenhauer. When one realizes that his position is hopeless, suddenly declare that the winning position is his all-along.

The administration proudly declared credit for the increase in oil production, even though it has systematically tried to limit oil production and regulate hydraulic fracturing by making false claims about its influence on ground water. In 2012, on lands controlled by the Federal government, the production of oil, natural gas, natural gas liquids, and coal all fell. It is the production on private and state controlled lands that is the great success story. See links under Washington's Control of Energy.

Reliable Electricity: On the No Carbon Tax Climate Sceptics blog, Geoff Brown has a post that succinctly sums the critical difference between reliable electricity (in this case from hydro) and unreliable wind. It links to the charting of power from hydro, coal, nuclear and wind under the Bonneville Power Administration, updated every 5 minutes, over a week. Bonneville administers the largest hydro-power system in the US. The failure of wind power can be seen virtually every week.

Brown juxtaposes this with an article on the important contributions of Bonneville hydro-power in winning WWII. One part of these contributions was that Bonneville provided the energy needed for the construction of 50,000 aircraft in the Pacific Northwest, including 11,000 bombers.

The wind advocates in the Pentagon, who claim wind power would add to national security, will ignore such vital considerations. See Energy Issues – US.

Carbon Tax: The US Congressional Budget Office (CBO) produced a study stating that the most effective way of reducing the huge US deficit would be instituting a carbon tax. Although the report is a useful analysis, one must be leery of such conclusions, especially considering the negative impact of a carbon tax. The Keynesian models used by the government greatly overestimated the favorable consequence of the so-called 2009 stimulus bill. The models projected unemployment would never exceed 8% and today's economy would be booming. The unemployment rate hit 10% and remains above 7%. The inflation -djusted growth rate remains below 3%. This is the worst economic recovery since WW II. For the CBO study, see link under Cap-and-Trade and Carbon Taxes

Number of the Week: \$22.2 Billion US v. 24.7 Billion US. The November 2 TWTW reported that a White House report to Congress stated that the Federal government spent \$22.2 Billion on climate change issues in FY 2013 (which ended on September 30, 2013). Medical researcher Martin Mangino remarked that this is almost as much as the Federal government spends on medical research, including clinical trials.

According to the web site of the National Institutes of Health, its total budget authority for FY 2013 was \$30.9 Billion, of which 80% (\$24.7 Billion) went to medical research. The table on the Research/Disease Areas showed that of the \$24.7 Billion, \$11,018 went to Clinical Research. The US is spending about one-half as much on clinical research on known threats to human health as it is spending on the speculative threat from human-caused global warming/climate change.

Of the \$22.2 billion in expenditures on climate change, \$8.1 billion went to "Energy Payments in Lieu of Tax Provisions." These are cash payments to developers of alternative energy sources such as wind farms. By contrast, NIH spent \$5.6 B on cancer research; \$4 B on brain disorder research; \$3.9 B on infectious diseases research; and \$3.9 B on woman's health research. These expenditures highlight the priorities given to various issues by those in Washington. See Article #4, and links at http://officeofbudget.od.nih.gov/br.html

ARTICLES:

For the numbered articles below please see this week's TWTW at: **www.sepp.org**. The articles are at the end of the pdf.

1. IPCC 's Bogus Evidence for Global Warming

By S. Fred Singer, American Thinker, Nov 12, 2013

http://www.americanthinker.com/2013/11/ipcc_s_bogus_evidence_for_global_warming.html

2. California's Green Reality Check

A new Energy Department study shows the state's carbon emissions goals are unattainable. Editorial, WSJ, Nov 11, 2013

http://online.wsj.com/news/articles/SB10001424052702304448204579182154135387652?mod= WSJ_Opinion_AboveLEFTTop

3. Germany Reinvents the Energy Crisis

A love affair with renewables brings high prices, potential blackouts and worries about 'deindustrialization.'

By Holman Jenkins, WSJ, Nov 9, 2013

http://online.wsj.com/news/articles/SB10001424052702304448204579185720802195590#printM ode

4. Dr. Francis Collins: Politics on the Frontier of Science

Major breakthroughs are possible in neuroscience, cancer, AIDS and Parkinson's—if Congress learns to set priorities.

By Joseph Rago, WSJ, Nov 8, 2013

http://online.wsj.com/news/articles/SB10001424052702304073204579170023892274000

NEWS YOU CAN USE:

Commentary: Is the Sun Rising?

German Scientists: Solar Cycle 24 Points To Dalton Or Maunder-Like Minimum, Boding Ill For A Climate Cooling

By Frank Bosse and Fritz Vahrenholt, Trans: P. Gosselin, Nov 11, 2013

 $\underline{http://notrickszone.com/2013/11/11/german-scientists-solar-cycle-24-points-to-dalton-or-maunder-like-minimum-boding-ill-for-a-climate-cooling/$

Suppressing Scientific Inquiry

Interpretation of UK temperatures since 1956

By Euan Means and Clive Best, Climate Etc. Nov 15, 2013

http://judithcurry.com/2013/11/15/interpretation-of-uk-temperatures-since-1956/#more-13759 [SEPP Comment: A paper Nature refused to print.]

[BEIT Comment. It paper Ivalure rejused to]

Challenging the Orthodoxy

Towards a theory of climate

By Christopher Monckton, WUWT, Nov 10, 2013

http://wattsupwiththat.com/2013/11/10/towards-a-theory-of-climate/

Our new paper: El Nino warming reduces climate sensitivity to 1.3 deg. C

By Roy Spencer, His Blog, Nov 11, 2013

 $\underline{http://www.drroyspencer.com/2013/11/our-new-paper-el-nino-warming-reduces-climate-sensitivity-to-1-3-deg-c/}$

Link to paper The role of ENSO in global ocean temperature changes during 1955–2011 simulated with a 1D climate model

By Roy Spencer and William Braswell, Asia-Pacific Journal of Atmospheric Sciences, Nov, 2013 http://link.springer.com/article/10.1007/s13143-014-0011-z

[SEPP Comment: The cartoon alone is worth the visit to Spencer's site.]

Another Reason Why IPCC Predictions (Projections) Fail. AR5 Continues to Let The End Justify the Unscrupulous Means.

By Tim Ball, A Different Perspective, Nov 14, 2013

 $\underline{http://drtimball.com/2013/another-reason-why-ipcc-predictions-projections-fail-ar 5-continues-to-let-the-end-justify-the-unscrupulous-means/}$

Defending the Orthodoxy

Provisional Statement on Status of Climate in 2013:

Press Release No. 981, WMO, Nov 13, 2013

http://www.wmo.int/pages/mediacentre/press_releases/pr_981_EN.html

Cosmic rays again ruled out as cause of global warming

By Douglas Main, NBC News, Nov 8, 2013 [H/t Clyde Spencer]

http://www.nbcnews.com/science/cosmic-rays-again-ruled-out-cause-global-warming-8C11565156

[SEPP Comment: The orthodox take. The first sentence gives it away.]

Questioning the Orthodoxy

Deeply Conflicted About Weather Extremes

By Roger Pielke Jr, His Blog, Nov 11, 2013

http://rogerpielkejr.blogspot.com/2013/11/deeply-conflicted-about-weather-extremes.html

[SEPP Comment: Another example of the images used that may be more important than the text. Pielke asserts that climate scientists should be demanding greater scientific integrity from their public faces.]

The IPCC's foul-weather friends

By Tony Thomas, Quadrant, Nov 12, 2013

http://quadrant.org.au/opinion/doomed-planet/2013/11/ipccs-foul-weather-friends/

[SEPP Comment: It's not about science. It is about money and world government. Good collection of quotes including: Climate Professor [actually Professor Emeritus of Environmental Sciences] Fred Singer waspishly described this as shifting money "from the poor in rich countries to the rich in poor ones"

50,000 attend rally with speech against climate agenda in Poland

By Anthony Watts, WUWT, Nov 12, 2013

 $\underline{\text{http://wattsupwiththat.com/2013/11/12/50000-at-rally-against-climate-agenda-in-poland/\#more-97313}$

[SEPP Comment: Includes link to video]

Pressing ahead on climate salvation

By David Rothbard and Craig Rucker, Washington Times, Nov 12, 2013

http://p.washingtontimes.com/news/2013/nov/10/rothbard-pressing-ahead-on-climate-

salvation/?page=1&utm_source=CFACT+Updates&utm_campaign=ee3f5cf0ab-

<u>Brace4full_globalwarming_press11_13_2013&utm_medium=email&utm_term=0_a28eaedb56-ee3f5cf0ab-260146769</u>

24 Hours of Reality Forgot About People

Climate Change Efforts Should Focus on Adaptation

By Tom Harris, Santa Barbara Independent, Nov 10, 2013

http://www.independent.com/news/2013/nov/10/em24-hours-realityem-forgot-about-people/

It's Not Just Winter, It's a New Ice Age

By Alan Caruba, Warning Signs, Nov 14, 2013

http://factsnotfantasy.blogspot.com.au/2013/11/its-not-just-winter-its-new-ice-age_14.html

[SEPP Comment: The headline is a bit much, but if the solar scientists predicting a pronounced cooling are correct, the consequences on world food production can be dangerous for humanity.]

More Dissent Erupts In Germany! Free Democrat Parliamentarian Slams IPCC Science, Proposed Climate Policy

By P. Gosselin, No Tricks Zone, Nov 14, 2013

http://notrickszone.com/2013/11/14/more-dissent-erupts-in-germany-free-democrat-parliamentarian-slams-ipcc-science-proposed-climate-policy/

The Climate Charlatans Gather in Warsaw

By Alan Caruba, Warning Signs, Nov 11, 2013

http://factsnotfantasy.blogspot.com/2013/11/the-climate-charlatans-gather-in-warsaw.html

Problems in the Orthodoxy

The Climate-Policy Trap

By Bjorn Lomborg, Project Syndicate, Nov14, 2013

http://www.project-syndicate.org/commentary/bj-rn-lomborg-on-how-political-choices-make-bad-climate-change-policies-even-worse

U.N. Revises Its Data But Won't Let Go Of Warming Tale

Editorial, IBD, Nov 12m 2013

http://news.investors.com/ibd-editorials/111213-678952-ipcc-loses-credibility-on-emissions-data-revision.htm

Japan slashes: Forget a 25% cut in CO2 emissions, now the target is a 3% rise!

By Jo Nova, Her Blog, Nov 16, 2013

http://joannenova.com.au/2013/11/japan-slashes-forget-a-25-cut-in-co2-emissions-now-the-target-is-3-8/#more-31756

Japan's new CO2 goal dismays U.N. climate conference

By Elaine Lies and Stain Rekley, Reuters, Nov 15, 2013

http://www.reuters.com/article/2013/11/15/us-climate-japan-idUSBRE9AE00P20131115

Rich nations must pay up if U.N. climate talks to succeed: China

By Stian Rekley, Reuters, Nov 14, 2013

http://uk.reuters.com/article/2013/11/14/us-climate-talks-china-idUKBRE9AD0WZ20131114

U.S., EU, Reject Brazilian Call for Climate Equity Metric

By Alex Morales, Bloomberg, Nov 14, 2013

 $\underline{\text{http://www.businessweek.com/news/2013-11-14/rich-nations-block-push-to-count-past-pollution-at-warming-talks}$

Inside the Warsaw Climate Summit

Obama's imperious behaviour at the 2009 climate summit is a key reason negotiations have failed dismally in recent years

By Donna Laframboise, NFC, Nov 12, 2013

http://nofrakkingconsensus.com/2013/11/12/inside-the-warsaw-climate-summit/

US fears climate talks will focus on compensation for extreme weather

Officials fear the devastating impact of Typhoon Haiyan will overshadow core issue of climate change prevention

By Stephen Leahy, Guardian, Nov 13, 2013

http://www.theguardian.com/environment/2013/nov/13/climate-talks-typhoon-haiyan-philippines [SEPP Comment: Now the administration fears that it will be held up on the false claims it made for political advantage.]

EU bids to revive carbon market on eve of Warsaw climate meet

By Staff Writers, Brussels (AFP), Nov 08, 2013

http://www.energy-

daily.com/reports/EU bids to revive carbon market on eve of Warsaw climate meet 999.ht ml

Seeking a Common Ground

The 52% 'consensus'

By Judith Curry, Climate Etc. Nov 10, 2013

http://judithcurry.com/2013/11/10/the-52-consensus/

How to earn trust in climate change debates

By Judith Curry, Climate Etc. Nov 12, 2013

http://judithcurry.com/2013/11/12/how-to-earn-trust-in-climate-change-debates/

Warmists can't stop themselves

By Walter Starck, Quadrant, Nov 15, 2013

http://quadrant.org.au/opinion/doomed-planet/2013/11/warmists-please-shut/

Lowering Standards

A Scathing Indictment of Federally-Funded Nutrition Research

By Steve McIntyre, Climate Audit, Nov 11, 2013

http://climateaudit.org/2013/11/11/a-scathing-indictment-of-federally-funded-nutrition-research/

[SEPP Comment: Major problems in funded research also occur in fields other than climate science.]

IAEA Showcases Work on Climate Change at Global Conference

Role of Nuclear Technologies in Mitigating Climate Change, Ocean Acidification and Environmental Protection

By Bruna Lecossois, IAEA, Nov 12, 2013

http://www.iaea.org/newscenter/news/2013/iaea-at-cop19.html

[SEPP Comment: Promoting fear with newsletters such as "Hot, Sour & Breathless – Ocean Under Stress. Is such fear-mongering good for the nuclear industry, which suffers from fear-mongering?]

Questioning European Green

Blackout Britain — why our energy crisis is only just beginning

Costly green measures are behind our rocketing energy bills. But as politicians dither, an even greater crisis awaits

By David Rose, Spectator, Nov 16, 2013 [H/t GWPF]

http://www.spectator.co.uk/features/9078561/the-real-energy-scandal/

Britain is sleepwalking towards the same economic calamity for which Germany is now bracing itself. Even ministers who can see the coming disaster lack the power (or knowledge) to change course.

BASF CEO says electricity grid fees put jobs at risk

By Edward Taylor, Reuters, Nov 10, 2013 [H/t Wind Action] http://uk.reuters.com/article/2013/11/10/uk-basf-energy-costs-idUKBRE9A907120131110?feedType=RSS&feedName=businessNews

Questioning Green Elsewhere

The Green Strategy Behind Solar and Wind

By Donn Dears, Power for USA, Nov 15, 2013

http://dddusmma.wordpress.com/2013/11/15/the-green-strategy-behind-solar-and-wind/

Australian petition for a cost-benefit inquiry on all plans to reduce carbon

Petition for a Cost/Benefit Inquiry on Programs to Reduce Emissions

By Des Moore, on Jo Nova's Blog, Nov 12, 2013

 $\frac{\text{http://joannenova.com.au/2013/11/australian-petition-for-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/\#more-31716}{\text{http://joannenova.com.au/2013/11/australian-petition-for-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-31716}{\text{http://joannenova.com.au/2013/11/australian-petition-for-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-31716}{\text{http://joannenova.com.au/2013/11/australian-petition-for-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-31716}{\text{http://joannenova.com.au/2013/11/australian-petition-for-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-31716}{\text{http://joannenova.com.au/2013/11/australian-petition-for-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-31716}{\text{http://joannenova.com.au/2013/11/australian-petition-for-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-31716}{\text{http://joannenova.com.au/2013/11/australian-petition-for-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-31716}{\text{http://joannenova.com.au/2013/11/australian-petition-for-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-31716}{\text{http://joannenova.com.au/2013/11/australian-petition-for-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-31716}{\text{http://joannenova.com.au/2013/11/australian-petition-for-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-a-cost-benefit-inquiry-on-all-plans-to-reduce-carbon/#more-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-inquiry-on-a-cost-benefit-$

Environmentalism won't save people from typhoons like in the Philippines. The precise opposite will: industry

By Brendan O'Neill, Telegraph, UK, Nov 12, 2013 [H/t GWPF]

http://blogs.telegraph.co.uk/news/brendanoneill2/100245522/environmentalism-wont-save-people-from-typhoons-like-in-the-philippines-the-precise-opposite-will-industry/

Funding Issues

Australia says "No" to UN wish list of billions – will "not support socialism masquerading as environmentalism"

By Jo Nova, Her Blog, Nov 11, 2013

http://joannenova.com.au/2013/11/australia-says-no-to-un-wish-list-of-billions-will-not-support-socialism-masquerading-as-environmentalism/#more-31686

Blowing hot air: U.S. reneges on funding pledge to fight global warming

By Tim Devaney, Washington Times, Nov 12, 2013

 $\underline{http://www.washingtontimes.com/news/2013/nov/12/blowing-hot-air-us-reneges-on-funding-pledge-to-fi/}$

[SEPP Comment: It would require specific congressional approval, not just a continuing resolution.]

Federal agencies stiff Congress on climate change spending information

By Michael Conger, Washington Examiner, Nov 7, 2013

http://washingtonexaminer.com/federal-agencies-stiff-congress-on-climate-change-spending-information/article/2538684

[SEPP Comment: The author of the article is not aware of two additional reports that bring the total to over \$165 billion since 1993.]

Communicating Better to the Public – Exaggerate, or be Vague?

Emotional blackmail is not a good basis for policy

By Martin Livermore, Scientific Alliance, Nov 11, 2013

http://scientific-alliance.org/scientific-alliance-newsletter/emotional-blackmail-not-good-basis-policy

The Super Storm Meme

By Doug Hoffman, The Resilient Earth, Nov 13, 2013 [H/t GWPF] http://theresilientearth.com/?q=content/super-storm-meme

Typhoon Haiyan: similar unspectacular cyclones arrive every 2-3 years

By Luboš Motl, Reference Frame, Nov 12, 2013

http://motls.blogspot.com/2013/11/typhoon-haiyan-similar-unspectacular.html

Billboard Campaign Calls On CNBC To Improve Its Climate Coverage

Yet CNBC Continues To Host Non-Experts Who Deny Climate Change

By Shauna Theel, Media Matters, Nov 14, 2013 [H/t ICECAP]

http://mediamatters.org/blog/2013/11/14/billboard-campaign-calls-on-cnbc-to-improve-its/196898

[SEPP Comment: Another misleading ad campaign – an expert is someone who agrees with our lobbying pressure group.]

Report Claims Forests In Germany Ailing Due In Part To Climate Change: Winters Have Been "Too Frosty"!

By P. Gosselin, No Tricks Zone, Nov 15, 2013

http://notrickszone.com/2013/11/15/report-claims-forests-in-germany-ailing-due-in-part-to-climate-change-winters-have-been-too-frosty/

Communicating Better to the Public - Make things up.

Climate change threatening polar bears in Canada

By Anne Thompson and Sophia Rosenbaum, NBC News, Nov 13, 2013

http://worldnews.nbcnews.com/_news/2013/11/13/21441506-climate-change-threatening-polar-bears-in-canada

[SEPP Comment: See link immediately below.]

Amstrup compares climate change to a Titanic for polar bears

By Susan Crockford, Polar Bear Science, Nov 14, 2013

 $\underline{\text{http://polarbearscience.com/2013/11/14/amstrup-compares-climate-change-to-a-titanic-for-polar-bears/\#more-3610}$

Eemian excuses: the warm was different then, polar bears were fine

By Susan Crockford, Polar Bear Science, Nov 12, 2013

 $\frac{http://polarbearscience.com/2013/11/12/eemian-excuses-the-warm-was-different-then-polar-bears-were-fine/$

[SEPP Comment: Catching the representative for Polar Bears International in more than a bit of deception. The heat was different then – it was warmer!]

The Zen of Population (N=0)

By Steve McIntyre, Climate Audit, Nov 9, 2013

http://climateaudit.org/2013/11/09/the-zen-of-population-n0/

[SEPP Comment: Amusing cartoon.]

Busted messaging: CFC's cause warming AND cooling

By Anthony Watts, WUWT, Nov 11, 2013

http://wattsupwiththat.com/2013/11/11/busted-messaging-cfcs-cause-warming-and-cooling/

[SEPP Comment: At the same place and time?]

Climate Poll Con Job: 'When you don't like the poll numbers, make up your own poll' – Media Duped Again By Stanford U. Pollster Jon Krosnick's Shoddy Agenda Driven Climate Polling

By Marc Morano, Climate Depot, Nov 14, 2013

http://www.climatedepot.com/2013/11/14/climate-poll-con-job-when-you-dont-like-the-poll-numbers-make-up-your-own-poll-media-duped-again-by-stanford-u-pollster-jon-krosnicks-shoddy-agenda-driven-climate-polling-a-climate-dep/

[SEPP Comment: Cites numerous contradicting polls.]

Communicating Better to the Public - Go Personal.

Denial

By Judith Curry, Climate Etc. Nov 11, 213 http://judithcurry.com/2013/11/11/denial/

Judge Orders NASA to Release Climate Change-Related Documents

By Matt Bewig, All Gov, Nov 10, 2013 [H/t WUWT]

 $\frac{http://www.allgov.com/news/controversies/judge-orders-nasa-to-release-climate-change-related-documents-131110?news=851618$

[SEPP Comment: In this article the current revenues of ExxonMobil are used to discredit the organization that prevailed in court.]

Models v. Observations

2013 Global Temperature - Flatlining

By David Whitehouse, GWPF, Nov 14, 2013

http://www.thegwpf.org/2013-global-temperature-flatlining/

Molecule painter and icy pal double the warming trend since 1997

By Luboš Motl, Reference Frame, Nov 13, 2013

http://motls.blogspot.com/2013/11/molecule-painter-doubles-warming-trend.html#more

[SEPP Comment: Making up observations to fit the models?]

Model Issues

Claim: LLNL scientists find precipitation, global warming link

Press Release LLNL, WUWT, Nov 13, 2013

http://wattsupwiththat.com/2013/11/13/claim-llnl-scientists-find-precipitation-global-warming-link/

Natural and Anthropogenic Perturbations in Cloud Albedo

By Staff Writers, SPPI & CO2 Science, Nov 14, 2013

http://scienceandpublicpolicy.org/originals/natural_and_anthropogenic_perturbations_in_cloud_al_bedo.html

Measurement Issues

Raising the bar on statistical significance

By Anthony Watts, WUWT, Nov 12, 2013

http://wattsupwiththat.com/2013/11/12/raising-the-bar-on-statistical-significance/

Uncertainty in SST measurements and data sets

By Judith Curry, Climate Etc. Nov 13, 2013

http://judithcurry.com/2013/11/13/uncertainty-in-sst-measurements-and-data-sets/

Changing Weather

Are Typhoon Disasters Getting More Common?

By Roger Pielke Jr, His Blog, Nov 12, 2013

http://rogerpielkejr.blogspot.co.uk/2013/11/are-typhoon-disasters-getting-more.html

Was Typhoon Haiyan the Most Intense Storm in Modern History?

By Patrick Michaels, CATO, Nov 15, 2013

http://www.cato.org/blog/was-typhoon-haiyan-most-intense-storm-modern-history

19th Century Was Deadliest For Cyclones

By Steven Goddard, Real Science, Nov 11, 2013 [H/t Climate Depot]

http://stevengoddard.wordpress.com/2013/11/11/19th-century-was-deadliest-for-cyclones/

Super Typhoon Haiyan/Yolanda – another overhyped storm that didn't match early reports

By Anthony Watts, WUWT, Nov 9, 2013

http://wattsupwiththat.com/2013/11/09/super-typhoon-haiyanyolanda-another-overhyped-storm-that-didnt-match-early-reports/

[SEPP Comment: Numerous updates on the intensity of the storm and the damage it did.]

Climate Con Artists Exploit Typhoon Haiyan

Editorial, IBD, Nov 12, 2013

 $\frac{http://news.investors.com/ibd-editorials/111213-678950-typhoon-haiwan-blamed-on-climate-change.htm?p=full}{}$

Climate Research: Lessons from Typhoon 'Haiyan'

By Axel Bojanowski, Spiegel International, Nov 12, 2013

http://www.spiegel.de/international/world/studies-point-to-causes-other-than-climate-change-of-haiyan-typhoon-a-933226.html

Deconstructing the hype on Super Typhoon Haiyan – Yolanda

By Paul Homewood, WUWT, Nov 13, 2013

http://wattsupwiththat.com/2013/11/13/deconstructing-the-hype-on-super-typhoon-haiyan-yolanda/

Deploy Resources on Forecast, NOT on Disaster

By Cliff Mass, Weather Blog, Nov 12, 2013

http://cliffmass.blogspot.com/2013/11/deploy-resources-on-forecast-not-on.html

There is a lot of talk about the world having to deal with more severe weather under global warming. But the "Inconvenient Truth" is that mankind is unable to handle the disasters of today. Better forecasts, greater resources for disaster relief, and predeployment could have huge positive impacts for our fellow humans faced by terrible natural disasters.

Philippines' typhoon tragic, but not our fault

By Tom Harris, Canada Free Press, Nov 13, 2013

http://canadafreepress.com/index.php/article/59209

Changing Seas

New paper finds sealevel rise has decelerated 44% since 2004 to only 7 inches per century

By Staff Writer, Hockey Schtick, Nov 13, 2013

http://hockeyschtick.blogspot.co.uk/2013/11/new-paper-finds-sea-level-rise-has.html

Link to paper: Global Sea Level Trend during 1993-2012

By Xianyao Chena, Ying Fenga, and Norden E. Huanga, Nov 13, 2013

http://www.sciencedirect.com/science/article/pii/S0921818113002397

The global mean sea level started decelerated rising since 2004 with the rising rate 1.8 ± 0.9 mm/yr in 2012.

Deceleration is due to slowdown of ocean thermal expansion during last decade.

Recent ENSO events introduce large uncertainty of long-term trend estimation.

[SEPP Comment: The time frame is too short for drawing any conclusions, except, perhaps, from tidal gages.]

October 2013 Sea Surface Temperature (SST) Anomaly Update

We now have 32 years of satellite-enhanced sea surface temperature data, with complete coverage of the global oceans.

By Bob Tisdale, Climate Observations, Nov 11, 2013

 $\underline{\text{http://bobtisdale.wordpress.com/2013/11/11/october-2013-sea-surface-temperature-sst-anomaly-update/\#more-5549}$

[SEPP Comment: The 32 year record is of particular interest.]

Changing Cryosphere – Land / Sea Ice

New paper finds ice core CO2 levels lag temperature by up to 5,000 years

By Staff Writer, Hockey Schtick, Nov 12, 2013 [H/t GWPF]

http://hockeyschtick.blogspot.co.uk/2013/11/new-paper-finds-ice-core-co2-levels-lag.html

Link to paper: A reconstruction of atmospheric carbon dioxide and its stable carbon isotopic composition from the penultimate glacial maximum to the last glacial inception

By Schneider, et al. Climate of the Past, No date

 $http://www.cli\underline{m\text{-}past.net/9/2507/2013/cp-9-2507-2013.html}$

[SEPP Comment: Temperatures fall up to 5,000 years before CO2 declines. Al Gore where are you?]

Acidic Waters

Today's unvalidated computer model

By Andrew Montford, Bishop Hill, Nov 14, 2013

http://bishophill.squarespace.com/blog/2013/11/14/todays-unvalidated-computer-model-1.html

Review of Recent Scientific Articles by NIPCC

For a full list of articles see www.NIPCCreport.org

Life-Long Exposure of Scleractinian Corals to Elevated CO2

Reference: Noonan, S.H.C., Fabricius, K.E. and Humphrey, C. 2013. Symbiodinium community composition in Scleractinian corals is not affected by life-long exposure to elevated carbon dioxide. *PLOS ONE* 8: e63985.

http://nipccreport.org/articles/2013/nov/12nov2013a1.html

How Coccolithophorids Respond to Ocean Acidification

Reference: Jin, P. Gao, K. and Beardall, J. 2013. Evolutionary responses of a coccolithophorid Gephyrocapsa oceanica to ocean acidification. *Evolution* 67: 1869-1878.

http://nipccreport.org/articles/2013/nov/12nov2013a2.html

Predicting Tropical Pacific Sea Surface Temperatures

Reference: Xue, Y, Chen, M., Kumar, A., Hu, Z.-Z. and Wang, W. 2013. Prediction skill and bias of tropical Pacific sea surface temperatures in the NCEP Climate Forecast System version 2. *Journal of Climate* 26: 5358-5378

http://nipccreport.org/articles/2013/nov/12nov2013a3.html

When model-estimated standard deviations of different portions of a region suddenly differ by something on the order of 200%, the so-called "progress" being made would appear to have a lot to be desired.

CO2 Effects on Hatch Size and Larval Growth of Walleye Pollock

Reference: Hurst, T.P., Fernandez, E.R. and Mathis, J.T. 2013. Effects of ocean acidification on hatch size and larval growth of walleye pollock (Theragra chalcogramma). ICES *Journal of Marine Science* 70: 812-822.

http://nipccreport.org/articles/2013/nov/13nov2013a3.html

The Political Games Continue

One Senator's War Against Climate Change

By Ezra Klein, Bloomberg, Nov 13, 2013

http://www.bloomberg.com/news/2013-11-13/one-senator-s-war-against-climate-change.html [SEPP Comment: The senator confuses knowledge with his belief.]

Cap-and-Trade and Carbon Taxes

CBO: Carbon tax chops \$1 trillion from deficit

By Ben Geman, The Hill, Nov 13, 2013

http://thehill.com/blogs/e2-wire/e2-wire/190167-cbo-carbon-tax-chops-1-trillion-from-deficit

Link to document: Options for Reducing the Deficit: 2014 to 2023

By Staff Writers, CBO, Nov 2013

http://www.cbo.gov/sites/default/files/cbofiles/attachments/44715-

OptionsForReducingDeficit.pdf

Cold Turkey (Why and how to Repeal the Carbon Tax)

By Viv Forbes and Helpers, Carbon Sense, Nov 11, 2013 http://carbon-sense.com/2013/11/11/cold-turkey2/

Subsidies and Mandates Forever

EPA Reduces Ethanol Requirement

First time since 2005 requirement has been cut

By CJ Ciaramella, Washington Free Beacon, Nov 15, 2013 [H/t Timothy Wise]

http://freebeacon.com/epa-reduces-ethanol-requirement/

EPA and other Regulators on the March

Is EPA Trying to Skew Climate Change Study for the Obama Administration?

"When governments can weigh in and request alterations to a scientific analysis, the message is clear."

By Bill Straub, PJ Media, Nov 14, 2013

http://pjmedia.com/blog/is-epa-trying-to-skew-climate-change-study-for-the-obama-administration/

Rep. Smith targets EPA use of 'secret science'

By Laura Barron-Lopez, The Hill, Nov 14, 2013

http://thehill.com/blogs/e2-wire/e2-wire/190319-rep-smith-to-introduce-bill-stopping-epa-use-of-secret-science

[SEPP Comment: EPA Administrator McCarthy insists EPA does high quality science. If it is of such high quality why hide it?]

EPA assailed on power plant regulations

By Ben Geman, The Hill, Nov 14, 2013

http://thehill.com/blogs/e2-wire/e2-wire/190269-epa-assailed-on-power-plant-carbon-regs

EPA Stealthily Propels Toward 'Massive Power Grab of Private Property Across the U.S.'

Redefinition of "waters of the United States" under the Clean Water Act would give EPA jurisdiction over as little as a backyard ditch.

By Bridget Johnson, PJ Media, Nov 12, 2013 [H/t Timothy Wise]

http://pjmedia.com/blog/epa-stealthily-propels-toward-massive-power-grab-of-private-property-across-the-u-s/

House chairman: EPA trying to control all U.S. waters

By Julian Hattem, The Hill, Nov 12, 2013

 $\underline{\text{http://thehill.com/blogs/regwatch/pending-regs/190027-house-chairman-epa-trying-to-control-all-us-waters}$

Nicholas Institute's Profeta discusses advantages of regulating carbon through Clean Air Act

Trans: by Staff Writers, EETV, Nov 6, 2013

http://www.eenews.net/tv/videos/1746/transcript

[SEPP Comment: Defending the EPA.]

Energy Issues – Non-US

Report: Climate measures falling short

By Ben Geman, The Hill, Nov 12, 2013

http://thehill.com/blogs/ballot-box/189927-report-climate-measures-falling-short-of-global-target

Link to IEA Press Release: Light tight oil does not diminish the importance of Middle East supply, IEA says in latest World Energy Outlook

By Staff Writers, IEA, Nov 12, 2013

http://www.iea.org/newsroomandevents/pressreleases/2013/november/name,44368,en.html

Link to report: World Energy Outlook 2013

By Staff Writers, IEA, Nov 12, 2013

http://www.worldenergyoutlook.org/

US's cheap energy pricing out UK industry

America's shale gas boom allows it to offer low energy prices to power-intensive industries as cost climbs in Europe

By Fiona Harvey, Guardian, Nov 12, 2013 [H/t GWPF]

http://www.theguardian.com/environment/2013/nov/12/us-energy-shale-gas-uk-industry

Hydro Power works; wind power fails.

By Geoff Brown, NCTCS, Nov 13, 2013

http://theclimatescepticsparty.blogspot.com.au/2013/11/hydro-power-works-wind-power-fails.html

[SEPP Comment: Raises the issue of which type of electricity generation is preferable in a national emergency, such as a major war. So much for the renewable advocates in the Pentagon.]

Pipelines

By Donn Dears, Power for USA, Nov 12, 2013 http://dddusmma.wordpress.com/2013/11/12/pipelines/

8 More Coal-Fired Power Plants Set to Close

By Heather Ginsberg, Townhall, Nov 14, 2013 [H/t Timothy Wise] http://townhall.com/tipsheet/heatherginsberg/2013/11/14/8-more-coalfired-power-plants-set-to-close-n1746765

Washington's Control of Energy

Obama and Economic Suicide

By Dennis Avery, Canada Free Press, Nov 12, 2013 http://canadafreepress.com/index.php/article/59189

Embattled administration touts oil milestone

By Laura Barron-Lopez, The Hill, Nov 15, 2013

http://thehill.com/blogs/e2-wire/e2-wire/190471-administration-turns-to-oil-milestone-for-relevance

Obama Takes Credit For Oil Boom He's Tried To Block

Editorial, IBD, Nov 15, 2013

http://news.investors.com/ibd-editorials/111513-679533-oil-output-soars-despite-obama-policies.htm?p=full

Fracking reverses decline in U.S. energy production

By H. Sterling Burnett, Austin American-Statesman, Nov 11, 2013

http://www.ncpa.org/commentaries/burnett-fracking-reverses-decline-in-us-energy-production

Oil and Natural Gas – the Future or the Past?

Conference Presenters: World Shale Gas Growth Is Aloft on Uncertain Dynamics

By Sonal Patel, Power News, Nov 14, 2013

http://www.powermag.com/conference-presenters-world-shale-gas-growth-is-aloft-on-uncertain-dynamics/?hq e=el&hq m=2784419&hq l=7&hq v=5e660500d0

[SEPP Comment: Includes some of the uncertainty on international production.]

Fracking 'is safe... and it's coming soon'

Households "right across the South" should prepare for gas fracking to begin in their areas, a senior minister warns

By James Kirkup, Telegraph, UK, Nov 8, 2013 [H/t GWPF]

http://www.telegraph.co.uk/earth/energy/fracking/10437394/Fracking-is-safe...-and-its-coming-soon.html

Oil Spills, Gas Leaks & Consequences

Some allowed home after Texas pipeline explosion

By Staff Writers, Fuel Fix, Nov 15, 2015

http://fuelfix.com/blog/2013/11/15/texans-hope-to-return-home-after-pipeline-fire/

[SEPP Comment: A drilling crew drill hit an existing pipeline? Where was the surveyor of the site?]

Nuclear Energy and Fears

Volume of nuclear waste could be reduced by 90 percent

By Staff Writers, Sheffield, UK (SPX), Nov 08, 2013

http://www.nuclearpowerdaily.com/reports/Volume_of_nuclear_waste_could_be_reduced_by_90_percent_999.html

Radioactive waste: Where to put it?

By Staff Writers, Boulder, CO (SPX), Oct 28, 2013

http://www.nuclearpowerdaily.com/reports/Radioactive_waste_Where_to_put_it_999.html

[SEPP Comment: With the current conditions in Washington, no place is safe enough. Even subduction zones in the deep oceans would be opposed.]

Fukushima plant readies for delicate fuel rod removal

By Staff Writers, Fukushima Daiichi, Japan (AFP) Nov 07, 2013

http://www.nuclearpowerdaily.com/reports/Fukushima_plant_readies_for_delicate_fuel_rod_removal_999.html

Alternative, Green ("Clean") Solar and Wind

Stagnating U.S. Wind (government addiction creates bubble symptoms)

By Lisa Linowes, Editorial, Wind Action, Nov 4, 2013

 $\frac{http://www.windaction.org/posts/38983-stagnating-u-s-wind-government-addiction-creates-bubble-symptoms \#. Uo Er WPmbOao$

Google, KKR to invest \$400 mn on solar projects

By Staff Writers, New York City (AFP), Nov 14, 2013 [H/t Toshio Fujita]

http://www.solardaily.com/reports/Google_KKR_to_invest_400_mn_on_solar_projects_999.html

[SEPP Comment: Would they be making such investments without subsidies and mandates?]

Alternative, Green ("Clean") Energy -- Other

Impacts of China's hydropower boom

By Judith Curry, Climate Etc. Nov 9, 2013

http://judithcurry.com/2013/11/09/impacts-of-chinas-hydropower-boom/#more-13710

[SEPP Comment: Looking at the negative side of China's promise to lower the carbon intensity of its GDP.]

Obama's Ethanol Policies Have Scarred The Earth

Editorial, IBD, Nov 13, 2013

http://news.investors.com/ibd-editorials/111313-679139-obama-ethanol-policies-bad-for-environment.htm?p=full

[SEPP Comment: The foolish policies began long before Obama became president.]

USDA Grant Aims to Convert Beetle-Killed Trees into Biofuel

By Staff Writers, Fort Collins CO (SPX), Nov 11, 2013

http://www.biofueldaily.com/reports/USDA Grant Aims to Convert Beetle Killed Trees into Biofuel_999.html

[SEPP Comment: Many of the trees the government refused to allow to be cut in a timely manner.]

Carbon Schemes

IEA Forecasts Global Renewables Expansion, Dismal Outlook for CCS

By Sonal Patel, Power Mag, Nov 13, 2013

http://www.powermag.com/iea-forecasts-global-renewables-expansion-dismal-outlook-for-ccs/?hq e=el&hq m=2784419&hq l=6&hq v=5e660500d0

Safe long term storage of CO2 is possible

By Staff Writers, Potsdam, Germany (SPX), Nov 11, 2013

http://www.spacedaily.com/reports/Safe_long_term_storage_of_CO2_is_possible_999.html

[SEPP Comment: On the massive scale needed?]

California Dreaming

Calif. Energy Commission Chairman Weisenmiller discusses impact of EPA power plant regs on his state

Transcript by Staff Writer, EETV, Nov 12, 2013

http://www.eenews.net/tv/videos/1747/transcript

[SEPP Comment: Wait until the bills come in.]

'Energy Imbalancing Market': Bailing Out California Green Power Two Hours/Day

By Wayne Lusvardi, Master Resource, Nov 13, 2013

 $\underline{http://www.masterresource.org/2013/11/energy-imbalancing-market-bailing-out-green-powertwo-hours-each-ca-day/\#more-28345}$

[SEPP Comment: Hoping to get out of a energy trap by using electricity subsidized by others.]

Health, Energy, and Climate

More on the antibiotic crisis: Could our government possibly screw up worse than this? By Staff Writers, ACSH, Nov 14, 2013

http://acsh.org/2013/11/antibiotic-crisis-government-possibly-screw-worse/

Other Scientific News

German scientists discover bacteria that make ice, clouds and rain

By David Gutierrez, Natural News, Nov 14, 2013 [H/t GWPF]

http://www.naturalnews.com/042895_ice-making_bacteria_precipitation_German_scientists.html

Methane-munching microorganisms meddle with metals

By Staff Writers, Atlanta GA (SPX), Nov 13, 2013

http://www.spacemart.com/reports/Methane munching microorganisms meddle with metals 99 9.html

Link to paper: Geochemical, metagenomic and metaproteomic insights into trace metal utilization by methane-oxidizing microbial consortia in sulphidic marine sediments

By Glass, et al. Environmental Microbiology, Nov 14, 2013

http://onlinelibrary.wiley.com/doi/10.1111/1462-2920.12314/abstract

Other News that May Be of Interest

The Current US Constitutional Struggle; A Canadian's Perspective.

By Tim Ball, A Different Perspective, Nov 13, 2013

http://drtimball.com/2013/the-current-us-constitutional-struggle-a-canadians-perspective/

A One-Size-Fits-All Government Cannot Survive in the iPad Era

By Scott Rasmussen, Real Clear Politics, Nov 9, 2013

http://www.realclearpolitics.com/articles/2013/11/09/a_one-size-fits-

all government cannot survive in the ipad era 120621.html

[SEPP Comment: The same could be said for monolithic climate science, particularly with the blogs.]

HS2: Cameron hails 'vital programme' as MPs approve funding

By James Landale, BBC, Oct 31, 2013 [H/t Number Watch]

http://www.bbc.co.uk/news/uk-24753394

[SEPP Comment: John Brignell of Number Watch wrote: "There were 34 votes against. This might seem derisory, but compared with the magnificent five who voted against the 2003 energy bill, which has all but destroyed the British economy and is now as expected killing people, it is a triumph. This is a sign that vertebrates have begun to evolve in the primeval swamps of British parliamentary politics." http://www.numberwatch.co.uk/2013%20October.htm]

Bureaucrats like big

By John Brignell, Number Watch, Oct, 2013

http://www.numberwatch.co.uk/BIG.htm

I only became fully aware of the scale of the change in university governance when a colleague was accused of "undermining central management".

[SEPP Comment: A long post on problems of bureaucratic regimentation.]

BELOW THE BOTTOM LINE:

Amazon deforestation could mean droughts for western US

By Staff Writers, Princeton NJ (SPX), Nov 11, 2013

http://www.terradaily.com/reports/Amazon_deforestation_could_mean_droughts_for_western_US_999.html

[SEPP Comment: Unreal collection of assumptions, etc.]

Ozone pact helped cool the planet: study

By Staff Writers, Paris (AFP), Nov 10, 2013

http://www.terradaily.com/reports/Ozone_pact_helped_cool_the_planet_study_999.html

[SEPP Comment: Nonsense!]

ARTICLES:

1. IPCC 's Bogus Evidence for Global Warming

By S. Fred Singer, American Thinker, Nov 12, 2013

http://www.americanthinker.com/2013/11/ipcc_s_bogus_evidence_for_global_warming.html

The United Nations Intergovernmental Panel on Climate Change (<u>IPCC</u>) was set up by the United Nations in 1988 and has been trying very hard to demonstrate the threat of a dangerous human influence on climate due to the emission of greenhouse gases. This is in line with their Charter,

which directs the IPCC to assemble reports in support of the Global Climate Treaty -- the 1992 Framework Convention on Climate Change (FCCC) of Rio de Janeiro.

It is interesting that IPCC "evidence" was based on peer-reviewed publications - but (reluctantly) abandoned only after protracted critiques from outside scientists. E-mails among members of the IPCC team, revealed in the 2009 'Climategate' leak, describe their strenuous efforts to silence such critiques, often using unethical methods.

I will show here that the first three IPCC assessment reports contain erroneous scientific arguments, which have never been retracted or formally corrected, but at least have now been abandoned by the IPCC -- while the last two reports, AR4 and AR5, use an argument that seems to be circular and does not support their conclusion. Australian Prof. "Bob" Carter, marine geologist and paleo-climatologist, refers to IPCC as using "hocus-pocus" science. He is a coauthor of the latest (2013) NIPCC (Non-governmental International Panel on Climate Change) report "Climate Change Reconsidered-II" www.climatechangereconsidered.org . We also coauthored a critique of the 2013 IPCC-AR5 Summary

http://heartland.org/sites/default/files/critique_of_ipcc_spm.pdf

1. IPCC-AR1 (1990)

This first report of the IPCC bases its entire claim for AGW on the fact that both CO2 and surface temperatures increased during the 20th century -- although not in lock-step. They assign the major warming of 1910 to 1940 to a human influence -- based on a peer-reviewed paper by BD Santer and TML Wigley, which uses a very strange statistical argument. But the basis of their statistics has been critiqued (by Tsonis and Swanson) -- and I have demonstrated empirically elsewhere that their conclusion does not hold.

While this faulty paper has never been retracted, it is now no longer quoted as evidence by the IPCC -- nor accepted by the overwhelming majority of IPCC scientists: Most if not all warming of the early 20th century is due to natural, not human causes.

2. IPCC AR2 (1996)

This report devotes a whole chapter, #8, to "Attribution and Detection." Its main feature is what one might call the "invention" of the "Hotspot," i.e. an enhanced warming trend in the tropical troposphere -- never actually observed.

Unfortunately, the "evidence," as presented by BD Santer, was published only after the IPCC report itself appeared; it contains two fundamental errors. The first error was to argue that the Hotspot is a "fingerprint" of human influence -- and specifically, related to an increase in greenhouse gases. This is not true. The Hotspot, according to all model calculations, is simply an atmospheric amplification of a surface trend, a consequence of the physics of the tropical atmosphere.

[Technically speaking, it is caused by increased convective activity whereby cumulus clouds carry latent heat from the surface of the tropical ocean into the upper troposphere. In other words, the Hotspot is not human-caused, but arises from a "moist-adiabatic lapse rate" of the atmosphere. This effect is discussed in most meteorological textbooks and is widely accepted.]

How then did AR2 conclude that a Hotspot exists observationally? This is the second issue: The IPCC selected a short interval in the atmospheric temperature record that showed an increase -- while the general trend was one of cooling. In other words, they cherry-picked their data to *invent* a Hotspot -- as pointed out in a subsequent publication by PJ Michaels and PC Knappenberger [see graph below]

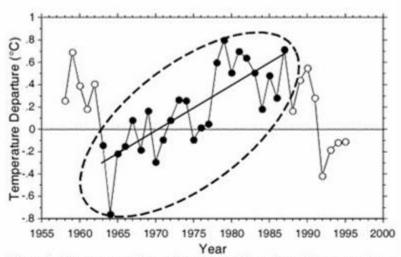


Figure 1. Temperature history from a crucial portion of the atmosphere, 1958–1995. For some reason, in the important paper "demonstrating" climate change, Ben Santer and colleagues only used the portion of the data circled here.

The matter of the existence of a Hotspot in the actual tropical troposphere has been the topic of lively debate ever since. On the one hand, DH Douglass, JR Christy, BD Pearson and SF Singer, demonstrated absence of a Hotspot empirically while Santer (and 17[!] IPCC coauthors), publishing in the same journal, argued the opposite. This issue now seems to have been finally settled, as discussed by Singer in two papers in *Energy & Environment* [2011 and 2013].

It is worth noting that a US government report [CCSP-SAP-1.1 (2006)] showed absence of a Hotspot in the tropics (Chapter 5, BD Santer, lead author). But the report's Executive Summary managed to obfuscate this result by referring to *global* atmosphere rather than tropical.

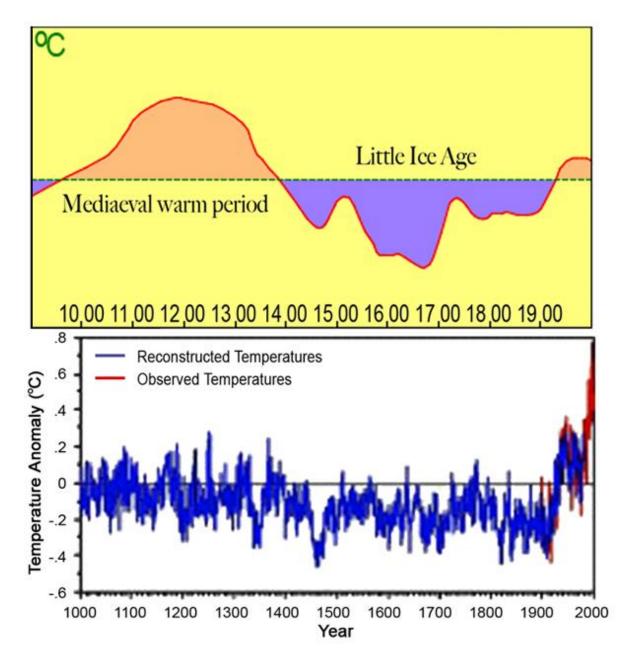
It is also worth noting that while the IPCC-AR2 used the Hotspot invention to argue that the "balance of evidence suggest a human influence," later IPCC reports no longer use the Hotspot argument.

Nevertheless, one consequence of this unfortunate phrase in AR2 has been the adoption of the Kyoto Protocol, an international treaty to limit emissions of greenhouse gases. Even though Kyoto expired in 2012, it has managed to waste hundreds of billions of dollars so far -- and continues to distort energy policies with uneconomic schemes in most industrialized nations.

3. IPCC AR3 (2001)

AR3 attributes global warming to human influences based on the "Hockey-Stick" graph, using published papers by Michael Mann, derived from his analysis of multi-proxy data. The

hockeystick graph [bottom graph below] claims that the 20th century showed unusually rapid warming -- and thus suggests a strong human influence. The graph also does away with the well-established Medieval Warm Period and Little Ice Age, which were shown in earlier IPCC reports [see top graph below].



It was soon found that the Hockeystick graph was in error and did not deserve continued reliance. Canadian statisticians Steven McIntyre and Ross McKitrick demonstrated errors in Mann's statistical analysis and in the use of certain tree-ring data for calibration. In fact, they showed that Mann's algorithm would generate a Hockeystick graph -- even if the input data was pure noise. [I served as a reviewer for M&M's initial paper in *Energy & Environment* 2003.]

It is worth noting that the IPCC no longer uses the Hockeystick to support human-caused warming, even though AR3 still claims to be at least 66% certain that greenhouse-gas emissions are responsible for 20th century warming.

4. IPCC-AR4 (2007) and AR5 (2013)

Both reports use essentially the same faulty argument in their attempt to support their conclusion of human-caused global warming. Their first step is to construct a model that tries to match the reported 20th-century surface warming. This is not very difficult; it is essentially a 'curve-fitting' exercise: By selecting the right level of climate sensitivity and the right amount of aerosol forcing, they can match the reported temperature rise of the final decades of the 20th century, but not the initial decades -- as becomes evident from a detailed graph in their Attribution chapter. This lack of agreement is due to the fact that their models ignore major forcings -- both from variations of solar activity and from changes in ocean circulation.

They then use the following trick. They re-plot their model graph, but *without* an increase in greenhouse gases; this absence of forcing now generates a *gap* between the reported warming and unforced model. Then they turn around and argue that this gap *must* be due to an increase in greenhouse gases. It appears to me that this argument may be circular. Even if the reported late-20th-century surface warming really exists (it is absent from the satellite and radiosonde records), the IPCC argument is not convincing.

It is ironic, however, that IPCC claims increasing certainty (at 90% in AR4 and at least 95% in AR5) for an attribution to human causes, which appears to be contrived. Additionally, while AR4 calculates a Climate Sensitivity (for a doubling of CO2) of 2.0 - 4.5 degC, AR5 expands the uncertainty interval to 1.5 - 4.5 degC. So much for the claim of *increased* certainty in the IPCC-AR5 Summary.

Yet, while claiming increased certainty about manmade global warming, both reports essentially ignore the absence of any surface warming trend since about 1998. Of course, they also ignore absence of any significant warming in the troposphere, ocean record, and proxy data during the crucial preceding (1979-1997) interval.

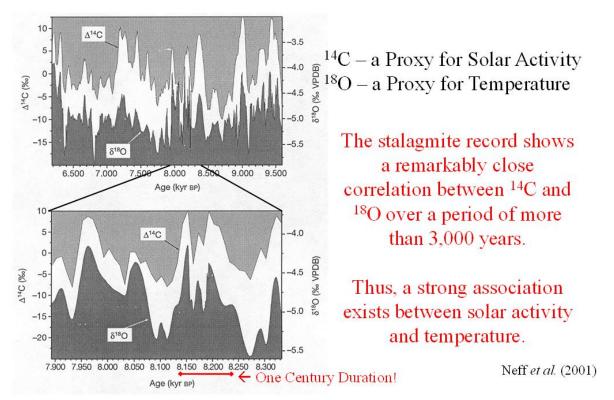
Conclusion

In spite of much effort, the IPCC has never succeeded in demonstrating that climate change is significantly affected by human activities -- and in particular, by the emission of greenhouse gases. Over the last 25 years, their supporting arguments have shifted drastically -- and are shown to be worthless. It appears more than likely that climate change is controlled by variations in solar magnetic activity and by periodic changes in ocean circulation.

[Full disclosure: I have a very small dog in this fight, having demonstrated some time ago that solar-emitted magnetic fields, projected into interplanetary space by the solar wind, modulate the intensity of cosmic rays striking the Earth's atmosphere; this is no longer a contentious, hot-topic issue. The exact mechanism by which cosmic rays then influence the climate is not known in detail, but current efforts, mainly by a Danish research group, focus on changes in Earth's cloudiness.]

However, that there is no doubt about the existence of such a solar influence on climate. As shown in the graph below, cosmic-ray intensity (as measured by the radioactive carbon isotope C-14) and terrestrial climate (as measured by the oxygen isotope O-18) correlate in amazing detail over an interval of at least 3000 years (see graph below; the bottom graph is the central section, blown up to reveal detail)

Stalagmite Records in Oman



S. Fred Singer is professor emeritus at the University of Virginia and director of the Science & Environmental Policy Project. His specialty is atmospheric and space physics. An expert in remote sensing and satellites, he served as the founding director of the US Weather Satellite Service and, more recently, as vice chair of the US National Advisory Committee on Oceans & Atmosphere. He is a senior fellow of the Heartland Institute and the Independent Institute. He co-authored the NY Times best-seller Unstoppable Global Warming: Every 1500 years. In 2007, he founded and has since chaired the NIPCC (Nongovernmental International Panel on Climate Change), which has released several scientific reports

[Seewww.NIPCCreport.org]. For recent writings,

see http://www.americanthinker.com/s_fred_singer/and also Google Scholar.

A FEW COMMENTS:

- Randy+Fardal
- 5 hours ago

We probably shouldn't snicker at the two or three intellectually inferior commenters here at AT, but it's hilarious to watch them go berserk whenever someone writes another article like this one that drives another nail into their AGW coffin. Their little 79-IQ heads nearly explode. (Though being brain dead probably would improve their teaching at UMass, The University of East Anglia, or wherever else our unwelcome leftists propagandize and brainwash for a living) Scientific truth, as published in this article, exposes their lies and that jeopardizes their taxpayer-funded AGW grants. So they post disinformation and attempt censorship to selfishly save their jobs as societal parasites. They huffily scold that their emperor is fully clothed, while closing their eyes to reality. They attempt to block alternative viewpoints, while hypocritically preaching scientific discovery at their taxpayer-subsidized day jobs.

Because they obviously are finalists for "World's Most Annoying Organism", their associates try to avoid them like bedbugs. So they seek psychological refuge here, posting the same inane comments over, and over, and over:

- Yawn; Yes, the Koch brothers and big oil probably secretly funded my comment, blah, blah
- Yawn; Yes, all of the AGW heat magically sank to the bottom of the ocean and probably is hiding there (even though warm fluids rise), blah, blah, blah
- Yawn; Yes, everything is a vast right-wing conspiracy, just as Mrs. Clinton said, blah, blah, blah
- Yawn; Yes, your fellow AGW lunatic, Ted Kaczynski, is just as sane as you are, blah, blah... Oh wait; that one's actually true.

Imvexed

• 4 hours ago

Undoubtedly one of the greatest scams perpetrated on the on the populace of the world and no one goes to jail for lying.....no wonder Barry wants to jump in on it. If there's a scam he'll be in charge although he knows nothing.

Black Racism

I like it when the global alarmists tell me the sun's output is constant (they never seem so infantile as when they spout out nonsense like that).

A moron will then say, where does it say that the sun is constant?

.

In the their stupid climate models, they make the FALSE assumption that the Sun's output is constant. It is a totally false assumption that gives them a totally false output to their models (which they sought in the ifrst place).

VonMisesJr

• an hour ago

Socialist must have a crisis and perpetual war to justify central planning. Throughout the twentieth century, socialist promulgated war socialism in WWI, WWII, Sino-Japanese War, Korean War, Vietnam and now unending so-called kinetic actions in Iraq, Afghanistan, Pakistan, Libya and Sudan. In the last fifty years they have invented the War on Poverty, War on Global Cooling, War on Global Warming, War on Climate Change and the War on Women. They are all a ruse to implement, continue and never cease central planning.

In the process, they bastardize the meaning of words to promote and obscure their scam. "Natural Science" has a meaning as one of the three hard sciences of mathematics, logic and sciences. These are subject to experiment, evidence and observation as the theories advanced can be tested and only continue as theorems if they do not prove false, as opposed to the social sciences that include "Human Action" that are not dictated by hard rules.

The socialist speak of "scientific consensus" that is an oxymoron. Opinion is nonsense in science as it is either a positive result that validates the theorem may be correct or a negative that disproves the theorem. A superb book that explains this along with the faux philosophy that accompanies socialism is found in Hayek's "Counter-Revolution of Science." It is a great read that exposes the fallacies of their logic and delves into much good philosophical debunking of St. Simon and Comte.

PalmettoLonghorn

• 2 hours ago

President Eisenhower warned of the scientific elite we have seen emerge surrounding the AGW "theory". Unfortunately, the scientific grants (from government) drive the science. The UN is nothing more than a wealth re-distribution scheme (Western world to emerging/third world). Then you throw in "scientists" like Mann, et.al. with their huge egos and all the ingredients are present for a colossal waste of resources and time. Luckily, facts are stubborn things to ignore. Well Done, Dr. Singer.

•

Pop-Up

• 3 hours ago

Yesterday I was appalled that the UN Delegate from the Philippines gave a heartfelt and tear laden testimony about the recent devastation. Even mentioning that he was not sure that all of his own family had survived. He closed by saying - "How can anyone deny Global Warming now" (or words very close to this)

He was given a standing ovation.

I believe most of them think the USA will pay their individual countries when it can be 'proved' the USA is the main culprit.

•

MaxWedge

• 3 hours ago

Good enough for me, Mr. Singer.

•

numbatdog

• 20 minutes ago

Ah, facts.

But why bother, S.Fred?

The true believers and their sidekick media are beyond facts. They now simply know whats true because they believe it and therefore its true.

It has nothing to do with reality anymore.

If they were vulnerable to reason at all, the utter failure of all the global warming predictions would be enough to cause doubt.

But like the Bourbons, they learn nothing and forget nothing.

2. California's Green Reality Check

A new Energy Department study shows the state's carbon emissions goals are unattainable. Editorial, WSJ, Nov 11, 2013

http://online.wsj.com/news/articles/SB10001424052702304448204579182154135387652?mod= WSJ_Opinion_AboveLEFTTop

Governor Jerry Brown ought to be canonized as the patron saint of hopeless environmental causes. Consider a new U.S. Department of Energy study that finds that California will fall far short of its 2050 emissions goal even under the most ambitious (i.e., unrealistic) policies.

The California Air Resources Board asked the Energy Department's Lawrence Berkeley National Laboratory to analyze how various environmental policies help achieve the state's goal of reducing statewide emissions to 80% below 1990 levels by 2050. The lab's conclusion: Dream on.

Assuming California's implausible and economically damaging policies were implemented in totality—cap and trade, low carbon fuel and renewable electricity standards, zero-emissions-vehicle mandate, and more—emissions in 2050 would be virtually unchanged from today. Even if

the state were to adopt more aggressive measures, emissions would exceed the state's target by 100%.

For example, the state could obtain 50% of its electricity from wind, solar, geothermal and biomass; grow its fleet of zero-emission vehicles to 17 million from 50,000 today; increase fuel efficiency to 78 miles per gallon, and expand rooftop solar generation by 800%. It would still miss its target by a green mile.

According to the study's lead researcher, Jeffery Greenblatt, California would in effect have to squeeze 90% of emissions out of every corner of its economy to meet its goal. That can't be done purely with more renewable energy, electric cars or high-speed rail. Demand for energy must also significantly be reduced. But demand is primarily driven by population and economic growth, which Sacramento can't control, try as the politicians might to reduce both.

3. Germany Reinvents the Energy Crisis

A love affair with renewables brings high prices, potential blackouts and worries about 'deindustrialization.'

By Holman Jenkins, WSJ, Nov 9, 2013

 $\underline{\text{http://online.wsj.com/news/articles/SB10001424052702304448204579185720802195590\#printMode}$

ObamaCare isn't the only policy train wreck in progress. Like Mao urging peasants to melt down their pots, pans and farm tools to turn China into a steel-producing superpower overnight, Germany dished out subsidies to encourage homeowners and farmers to install solar panels and windmills and sell energy back to the power company at inflated prices. Success—Germany now gets 25% of its power from renewables—has turned out to be a disaster.

As Germans rush to grab this easy money, carbon dioxide output has risen, not fallen, because money-strapped utilities have switched to burning cheap American coal to provide the necessary standby power when wind and sun fail.

Because the sun and wind are intermittent and the power grid is poorly arranged to accommodate them, brownouts and blackouts threaten this winter.

Because the bills are paid by households and businesses, electricity rates are triple those in the United States. An immediate panic is jobs, as prized industries head to the U.S. for cheaper energy unleashed by the shale revolution. Europe's top energy official now speaks frankly of the "deindustrialization in Germany."

In Britain, where policy has been nearly as generous to renewables, "It's fine being very, very green, but not if you're interested in manufacturing," complains a prominent CEO.

Wind turbines stand behind a solar power park near Werder, Germany. Getty Images

Democracy's great virtue is that it doesn't follow schemes off a cliff, but the normal adjustment mechanisms are hampered by the fact that Europe's energy disaster implicates the entire political spectrum.

Ed Miliband, leader of Britain's Labour Party, set the theme for next year's British election when he recently promised to freeze energy prices if elected. But Labour isn't about to disown the solar and wind subsidies it created. It wants to soldier on, shifting the cost to business. In Germany, conservative Angela Merkel embraced the opposition's energy economics wholesale after Fukushima, leaving voters who are alarmed about energy prices no place to turn in September's election except Angela Merkel, who vaguely indicated some moderation of the energiewende (energy revolution) she launched and continues to champion.

An unwonted glimmer of reason has actually come from her likely Social Democrat coalition partner, author of Germany's original green energy law, whose spokesman now says: "We need to ensure that renewable energy is affordable. And we need to put an end to the idea that we can pull out of nuclear and coal simultaneously. This won't work."

It's tempting to assume Europe's politicians were praying in the church of global warming. But more important is their subscription to resource-depletion ideology, which convinced them they'd picked a political winner because rising fossil fuel prices were guaranteed to make green energy look cheap in comparison.

"When more people consume oil and coal, the price will go up, but when more people consume renewable energy, the price of it will go down," explained Ms. Merkel's top energy adviser.

We have here an idea seemingly impervious to experience and part of the mental baggage of every politician likely to get elected in our world. "It is absolutely certain that [fossil energy] demand will go up a lot faster than supply. It's just a fact," President Obama explained in 2011. The U.S. "cannot afford to bet our long-term prosperity on a resource that will eventually run out."

Mr. Obama mentioned shale exactly once in his speech—and only to say shale would run out too.

If all this were true, Europe wouldn't be in its present fix. Here's the real truth: The shale revolution is less revolutionary than it seems. It has shocked settled misconceptions only because it happened under the noses of Americans, in populated areas where the casual assumption was that "resources" would long ago have been dug out and carted away.

In fact, the world's store of fossil hydrocarbons is truly vast, including almost unimaginable quantities of methane hydrates. The challenge is the technological and economic one of getting access to a given resource at an affordable price—a challenge ever since men used rags to soak up oil from natural seeps. For 150 years, the price of a barrel of oil has fluctuated between \$10 and \$100 (in 2011 dollars), a range that has been sufficient to call forth new reserves and feedstocks when needed to maintain hydrocarbons as a source of competitively priced energy.

Europe's energy crisis is a lot like ours of 40 years ago—self-inflicted. Europe's dream was untenable the minute energy prices began falling in a major trade competitor like the United States. The big question now is how far will the political upheaval go when an entire elite is

implicated in an unsatisfactory energy experiment, which inevitably has become wrapped up in public disappointment with another failed elite project, the European Union itself.

Fascinating too will be the fate of Europe's shale. In Europe, government, not landowners, controls and benefits from mineral resources, creating the zero-sum resource politics that have made the Mideast a paragon of stability and civil progress. What about global warming? At least that answer is easier. European voters are coming out where Americans have, realizing that foreswearing cheap energy will do nothing for CO2 levels (and even less for climate) as long as others aren't foreswearing cheap energy too.

4. Dr. Francis Collins: Politics on the Frontier of Science

Major breakthroughs are possible in neuroscience, cancer, AIDS and Parkinson's—if Congress learns to set priorities.

By Joseph Rago, WSJ, Nov 8, 2013

http://online.wsj.com/news/articles/SB10001424052702304073204579170023892274000

If the early years of the 21st century often feel like a retread of the 1970s—economic anxiety, turmoil overseas, American leaders who don't seem to understand what the problems are much less how to fix them—the geneticist Francis Collins suggests less dispiriting resemblances. The "arrow of progress that we're riding in biomedicine" took flight 40 or so years ago but is traveling faster and further now.

"You could see that maybe this field of genetics had something to offer to human medicine," Dr. Collins recalls of the scientific mood when he began his career, "although in the 1970s most people thought that was a hundred years away." The potential was realized far sooner, in part because of Dr. Collins's pioneering 1990s work managing the Human Genome Project, which by 2003 had decoded all three billion chemical units that make up DNA—or what he calls "the instruction book of life."

Dr. Collins is now the director of the National Institutes of Health, the world's premier financier of medical inquiry, which he has run for the past four years. He visited the Journal offices earlier this month to discuss NIH-backed advances and to explain "the crunch we're in" during an era of limited fiscal resources and "all the political upheaval we're in the midst of."

The NIH's \$30 billion or so annual budget, 84% of which underwrites peer-reviewed research grants in all 50 states, is 22% less in purchasing power than it was in 2003. Behind Dr. Collins's geniality and avuncular manner, and his excitement about "this exponential curve of learning how life works and how things go wrong and how disease occurs," is an important warning: The U.S. may be putting its gains in science, technology and medicine at risk.

These advances include the reality that on current pace, every day you survive you add about five or six hours to your life, Dr. Collins notes. A person born in the U.S. today will live about 30 years longer than somebody in 1900. He credits these longevity dividends in large measure to NIH investment: "Whenever you hear about a research breakthrough in anything to do with cancer, diabetes, heart disease, HIV/AIDS, influenza, whatever, in the United States, it's extremely likely that NIH supported that effort."

Take oncology. Cancer is "a disease of DNA," he says, and the NIH's \$400 million investment in the first human genome sequence has translated into \$4,000 sequencing technologies that are now headed toward \$1,000 per test. "It does make it look as if our means of defining cancer by what tissue it arose in is going to go by the boards pretty soon," he says. Lung, breast, blood—"it almost doesn't matter. What matters are the genes that are mutated, the mistakes in the instruction book."

This insight is leading to new and better therapies that don't simply hurt all cells that are growing too quickly, leaving doctors "always right on the edge of trying to kill the cancer without killing the patient." For the first time, Dr. Collins says, "we have a clear list of targets that are much more smart-bomb opportunities than carpet-bomb opportunities." The Food and Drug Administration is beginning to approve such specialized therapeutics, which he calls "gratifying indeed."

Dr. Collins is also drawn to what may be "the last frontier of medical research"—neuroscience. "There are 86 billion neurons in here," he says, tapping his forehead with an index finger. "Each of those has maybe a thousand connections. So the complexity of this structure exceeds anything else in the known universe, and some have even worried that our brains are not complicated enough to understand our brains."

Researchers don't yet understand how we lay down memories or retrieve them, for instance, or how we control our limbs, but the scientists are making astonishing advances. Dr. Collins points to an NIH team that developed a method to implant memories in rodents using bioelectric signals.

"We have the ability, in a live mouse who's running through a maze, to actually image thousands of neurons in the hippocampus and see what's happening as that mouse learns how to get from one spot to another," he explains. "In other experiments, researchers have transferred memories from a trained mouse to a naïve mouse, and that mouse seems to know how to negotiate a maze that it's never seen before.

"Now that's pretty freaky. Maybe we're starting to learn some of the language by which the brain operates."

Dr. Collins says "the paradox of my daily experience" is that the potential of medical research is unprecedented and yet he is trailed by "this sense that we are not taking full advantage of what is in many ways our most critical resource." NIH appropriations doubled in real terms between 1998 and 2003 but leveled off after that and then started to decline. "We're getting pretty close to being undoubled," he says. The NIH now turns down six of every seven grant applications; in 1979, it accepted two of five.

In some ways this competitiveness is a measure of biomedical success, to the extent that it reflects a larger scientific writ—more projects in more fields to choose from—and not merely less federal support. But Dr. Collins points out that research has grown more expensive to conduct. When the share of applicants who successfully apply for a grant drops below 20%, the grant process becomes "almost like a lottery." Scientists who should qualify and would have a decade ago are turned away.

Dr. Collins also appears almost physically pained by sequestration and its automatic caps on discretionary domestic spending that Congress adopted in January after failing to reach a budget

deal: "It was supposed to be the poison pill that was so poisonous that nobody would consider swallowing it but, gosh, we did."

He was instructed to apply the 4.7% NIH cut for 2013 equally across its 27 institutes and research centers—in other words, cut the same amount over all scientific disciplines. The cuts meant, he says, that 640 projects that would have otherwise been funded were canceled over the last few months. "People say, 'Well you know, it's only 5%.' For those grantees, it was 100%."

The NIH director must be inherently political as well as scientific to secure a budget on Capitol Hill. But the genome is somewhat easier to decode than the political class. Dr. Collins has met one-on-one with more than 250 members of Congress over his NIH tenure and "I don't think I can remember a single one of those visits that went badly. Everybody cares about this, for themselves, for their families, for their constituents. Everybody wants to see advances made."

The interactions "are always really good," he continues. "But the conversation for at least the last three years always end up with: Buuut"—he draws out the word in his Shenandoah drawl—"there's nothing we can do about the fact that our country is in a fiscal crisis, and we've got to do something about the deficit, and until we work that out, you're just going to have to hold on. So we're holding on. But for how long?"

The administration of which Dr. Collins is a part would prefer that Congress simply turn off the sequester, and maybe the parties will cut the deal that is in the offing to trade more immediate spending for longer-term reforms. But another way of reading the situation—my view, not Dr. Collins's—is that the NIH is a casualty of Washington's chronic failure to set priorities.

The NIH is a line item in the \$982 billion Health and Human Services budget, most of which automatically flows to programs like Medicare. The failure to modernize the entitlement state inevitably means there is less available for basic research. Every tax dollar spent developing the Affordable Care Act website that doesn't work, or enriching the corn lobby with ethanol subsidies, or propping up the 47 federal job retraining programs, is a dollar that Dr. Collins could have spent instead.

Whatever the cause, the consequences could have ramifications for decades. Dr. Collins warns that other countries are luring away U.S. scientific talent by offering better opportunities. Even more worrying: "My greatest concern—this is the thing that wakes me up at night—is that a whole generation of scientists are looking at this situation and getting increasingly discouraged and disheartened."

Research can't be turned on and off like a faucet, he adds. Since knowledge is incremental and builds over time, medical innovations may be delayed or never happen at all: "We can all think of findings that seemed completely irrelevant but ultimately changed everything and led to people's lives being saved, but began in the strangest way."

The NIH may be bankrolling such soon-to-be-watershed work right now. Dr. Collins invokes some of the more promising research: the "early days" of an AIDS vaccine that could be administered every three months instead of every day, pluripotent human cardiac cells beating in a petri dish, neurological stimulation that mitigates the tremors of Parkinson's disease.

Still nothing in the pipeline, however, that might cure Washington-style myopia.